

REMARKS

Allowed claims 5, 6, 9, 15 and 16 are present in their original form.

Claim 1 has been amended by the incorporation of the phrase "for receiving water from a wet web through a felt in a nip area comprising a press roll and a shoe, where the felt and the wet web placed thereon are compressed. This phrase, which is a statement of intended purpose of the belt, is introduced for the purpose of placing the claim in the proper context. More importantly, the claim has been amended by the recitation that the wet web side layer is "capable of contacting a felt" and "composed of a single, hydrophobic, high molecular weight, elastic material," and that the wet web side layer has "a wet web facing surface" and a "water holding section formed in its wet web facing surface." These latter recitations distinguish the invention from the prior art because they, in effect, require at least part of the interior surfaces of the water-holding section to be formed of the hydrophobic, high molecular weight, elastic material of which the wet web side layer is composed.

In Davenport, Gstrein, JP63-159591, and Best, the belt comes into direct contact with the wet web. A water-holding section cannot be formed in the surface of the belt without causing damage to the wet web. In the case of Best, which like the others, discloses a belt on which a wet web is placed directly (paragraph 0025), pores are provided on the web-contacting surface. However, the pores do not constitute a water-holding section. As stated by Best in paragraph 0005, "The pores are therefore not provided at all for the purpose of improving dewatering of the paper web, and cannot do so."

Fitzpatrick describes a belt in which water, squeezed from a wet web, is transferred through a felt to a surface of the belt, and shows water-holding grooves (FIG. 3) or holes (FIG. 4). However, Fitzpatrick does not disclose or suggest a structure wherein at least a part of the interior surfaces of

the water-holding section are hydrophobic. Moreover, it would not have been obvious from Fitzpatrick and Davenport to modify Davenport's belt by providing grooves or holes as in Fitzpatrick, because doing so would render Davenport's belt unusable for its intended purpose; the grooves or holes would damage the wet paper web with which Davenport's belt comes into direct contact.

In Muellner et al., a wet web is placed on a felt, and a water holding section is formed in a surface of the belt. However, in order to make the surface of the belt and the holding section hydrophobic, Muellner et al. need to apply a hydrophobic organic monomer as a coating over the entire land surface, which is a time-consuming operation. In contrast, in the invention defined in claim 1, as amended, the belt surface and the water holding section are made hydrophobic by forming the wet web side layer from a single, hydrophobic, high molecular weight elastic material. Like the applicant's invention, Muellner's belt has a wet web side layer, and the wet web side layer has a water-holding section. However, the wet web-side layer in Muellner is composed of two different materials, a polyurethane or rubber matrix 12 and a coating 20; not a single, hydrophobic, high molecular weight elastic material.

The same reasons as set forth in support of claim 1 apply to claim 7. Claim 7 recites the step of formation of a wet web side layer of a main body of a belt from a single, high molecular weight, hydrophobic, elastic material, and the step of formation of a water holding section on a wet web facing surface of the wet web side layer. Here, as in claim 1, these limitations distinguish the invention from the prior art because they, in effect, require at least part of the interior surfaces of the water-holding section to be formed of the hydrophobic, high molecular weight elastic material of which the wet web side layer is composed.

Claim 11, which was originally directed to a shoe press of a papermaking machine, has been amended so that it explicitly incorporates the press roll, shoe, wet web and felt as elements of the claimed combination. The same reasons as advanced in support of claim 1 also apply to claim 11. In addition, claim 11 explicitly recites additional distinguishing features of the invention, namely that the wet web is placed on the felt rather than directly on the belt, and that the wet web side layer contacts the felt.

Claim 10, which is a method claim, has been amended by adding the recitation that the film in the third step is formed on an inner surface of the water holding section "while maintaining the wet web facing surface of said wet web side layer as a hydrophilic surface." With this addition, claim 10 is essentially a method for producing the product of claim 5, which has been allowed, and should be found allowable for the same reason that claim 5 was considered allowable.

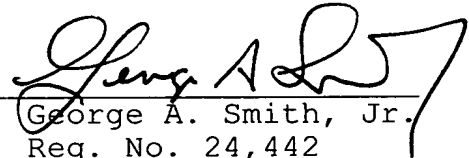
Kiuchi, Ashworth and the literature references do not appear to be any more pertinent than the other references to the present claims.

No fee is believed due. However, should a fee be required for added claims, or the like, please charge our deposit account 08-3040.

Favorable reconsideration of the application and allowance of the remaining claims, as amended, are requested.

Respectfully submitted,
HOWSON & HOWSON

By



George A. Smith, Jr.

Reg. No. 24,442

Howson & Howson

Box 457

Spring House, PA 19477

Telephone: 215 540 9200

Facsimile: 215 540 5818